

## SYNTHETIC HUMAN PAPILLOMAVIRUS GENES

5 Synthetic DNA molecules encoding papillomavirus proteins are provided. The codons of the synthetic molecules are codons preferred by the projected host cell. The synthetic molecules may be used as a polynucleotide vaccine which provides effective immunoprophylaxis against papillomavirus infection through stimulation of neutralizing antibody and cell-mediated immunity.

1. 100% (100%)	
2. 100% (100%)	
3. 100% (100%)	
4. 100% (100%)	
5. 100% (100%)	
6. 100% (100%)	
7. 100% (100%)	
8. 100% (100%)	
9. 100% (100%)	
10. 100% (100%)	
11. 100% (100%)	
12. 100% (100%)	
13. 100% (100%)	
14. 100% (100%)	
15. 100% (100%)	
16. 100% (100%)	
17. 100% (100%)	
18. 100% (100%)	
19. 100% (100%)	
20. 100% (100%)	
21. 100% (100%)	
22. 100% (100%)	
23. 100% (100%)	
24. 100% (100%)	
25. 100% (100%)	
26. 100% (100%)	
27. 100% (100%)	
28. 100% (100%)	
29. 100% (100%)	
30. 100% (100%)	
31. 100% (100%)	
32. 100% (100%)	
33. 100% (100%)	
34. 100% (100%)	
35. 100% (100%)	
36. 100% (100%)	
37. 100% (100%)	
38. 100% (100%)	
39. 100% (100%)	
40. 100% (100%)	
41. 100% (100%)	
42. 100% (100%)	
43. 100% (100%)	
44. 100% (100%)	
45. 100% (100%)	
46. 100% (100%)	
47. 100% (100%)	
48. 100% (100%)	
49. 100% (100%)	
50. 100% (100%)	
51. 100% (100%)	
52. 100% (100%)	
53. 100% (100%)	
54. 100% (100%)	
55. 100% (100%)	
56. 100% (100%)	
57. 100% (100%)	
58. 100% (100%)	
59. 100% (100%)	
60. 100% (100%)	
61. 100% (100%)	
62. 100% (100%)	
63. 100% (100%)	
64. 100% (100%)	
65. 100% (100%)	
66. 100% (100%)	
67. 100% (100%)	
68. 100% (100%)	
69. 100% (100%)	
70. 100% (100%)	
71. 100% (100%)	
72. 100% (100%)	
73. 100% (100%)	
74. 100% (100%)	
75. 100% (100%)	
76. 100% (100%)	
77. 100% (100%)	
78. 100% (100%)	
79. 100% (100%)	
80. 100% (100%)	
81. 100% (100%)	
82. 100% (100%)	
83. 100% (100%)	
84. 100% (100%)	
85. 100% (100%)	
86. 100% (100%)	
87. 100% (100%)	
88. 100% (100%)	
89. 100% (100%)	
90. 100% (100%)	
91. 100% (100%)	
92. 100% (100%)	
93. 100% (100%)	
94. 100% (100%)	
95. 100% (100%)	
96. 100% (100%)	
97. 100% (100%)	
98. 100% (100%)	
99. 100% (100%)	
100. 100% (100%)	